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ABSTRACT

The importance of the U.S. Census as a monitor of social change in the past decade and harbinger of social change in the future is reviewed. Throughout the history of the U.S., the census has provided both the data that drive the economy and the numbers for equitably apportioning political power. The census reflects the fact that changes in population concentration identify growth markets. Growth is not merely geographic; the census identifies the various segments of the population and the rates at which they grow. Social and economic changes are foretold through changes in age distribution, the number of households in proportion to the population, and the changing composition of households. Other social changes that the census has reflected include: (1) a move from the farm to blue-collar work to white-collar work; (2) increasing literacy; (3) changing spending patterns; (4) the numbers of women in the work force; and (5) income differences among population segments. It is concluded that the census will continue to offer the same types of information, and that new technology will make it possible for many more individuals and groups to use the information for decision making. Eighteen figures illustrate the discussion. (SLD)

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THE U.S. CENSUS: MONITOR AND HARBINGER OF SOCIAL CHANGE

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Article I, Section 2 of the U.S. Constitution calls for this Nation's census:

Representatives...shall be apportioned among the severa^l states which may be included within this union, according to their respective numbers... The actual enumeration shall be made within three years after the first meeting of the Congress of the United States, and within every subsequent term of ten years in such manner as they shall by law direct.

Today—and in fact since its inception 200 years ago—the U.S. census has become far more than a simple head count. Even the first census in 1790 provided a few basic statistics pertinent to the militia and apportionment: the number of free white males over and under 16, the number of slaves, and the number of free white females.

The U.S. census is the longest running, regular periodic census in the world today. As such, it has become a trend series—both the monitor of social change in the prior decade and the harbinger of social change when the trends it shows are projected into the future.

In the nineteenth century the decennial census grew rapidly in scope. The law authorizing the 1840 census called for "all such information in relation to mines, agriculture, commerce, manufactures, and schools as will exhibit a full view of the pursuits, industry, education, and resources of the country." It wasn't until over a century later, in 1940, that legislation formally separated the various economic, agriculture, and government censuses from the decennial census of population and housing, although they were taken in different years than the decennial after 1902. Thus, throughout our Nation's history, census taking has provided the data that drive the economy as well as the numbers for equitably apportioning political power. In profiling who we are and how we live, the U.S. census provides demographic, economic, and social statistics for business and industry as well as data for government planning and, in recent times, counts used for distribution of government program funds.

Let's look at some representative statistics from the first 20 censuses, along with some sample survey projections of what the current 1990 census may show, from a market-oriented viewpoint.

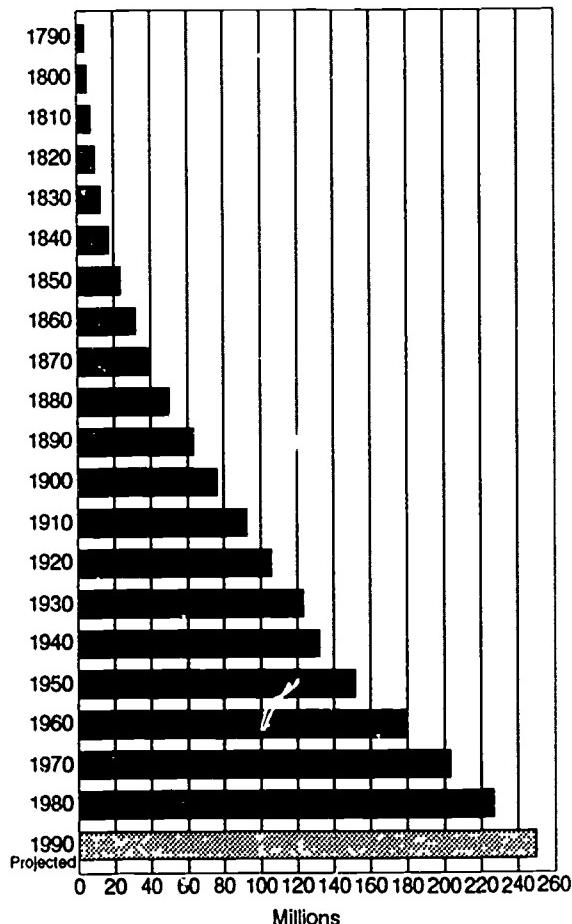
What kind of decisions might business and industry make on the basis of these statistics?

Population Shows Growth Markets

In 200 years we have grown from a Nation of almost 4 million to one of 250 million (Figure 1)—a growth rate of about 35 percent per decade over the first half of the 19th century, slowing to 25 percent in the second half and to 20 percent in the last decade. The twentieth century hasn't been quite as dynamic, but growth has been at least 10 percent per decade except for the depression years when it slowed to 7 percent between 1930 and 1940. We have been and still are a growth market!

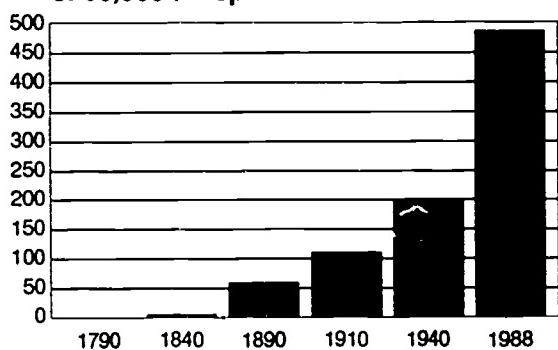
During those two centuries, market areas have concentrated, making them easier for business to

Figure 1.
Population of the United States



reach and serve. One hundred and fifty years ago only five urban places¹ numbered 50,000 or more persons (Figure 2). Today there are 486 such places and many amalgamate into large metropolitan areas. There are 37 metropolitan areas with over 1 million people. Seven cities within them have over 1 million (Figure 3). Census data, and the changes between one census and the next, point business and industry to where the large and/or growing markets are.

**Figure 2.
Number of Urban Places
of 50,000+ Population**

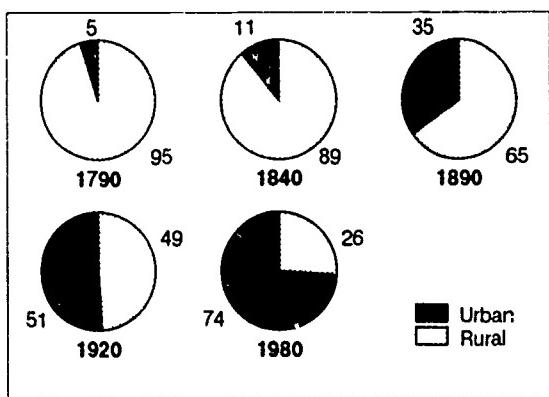


**Figure 3.
Number of Urban Places
of 1,000,000+ Population**

1790-1870	None
1880	1
1890	3
1940	5
1980	6
1988	7

As our population concentrated in cities and metropolitan areas, it shifted from being a 95-percent rural resident population in 1790 to a 74-percent urban one by 1980 (Figure 4). The 1920

**Figure 4.
Percent of Population Living
in Urban and Rural Areas**

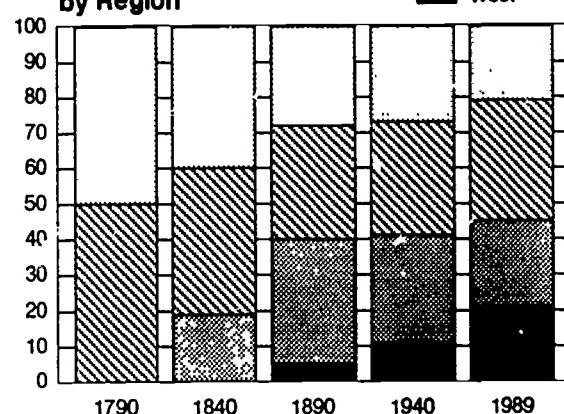


census showed the turning point which made the urban/rural apportionment so controversial in the then rural-dominated House of Representatives that this census became the only one after which reapportionment did not occur. The formula called the Method of Equal Proportions, now applied automatically for determining apportionment, was not adopted until 1941. The Supreme Court Decision (*Baker vs Carr*), which led to "one-man-one-vote" apportionment, did not come about until 1962.

Growth Goes West

"Go West, young man," was a slogan of an earlier time, which pointed to where opportunity lay. In the mid-19th century going West meant heading to the Midwest, by the end of that century it meant going all the way to the Pacific Ocean (Figure 5).

**Figure 5.
Percent of Population,
by Region**



The 1890 census documented the closing of the frontier. America was now settled from coast to coast, although very sparsely populated in the Western states. Those who look for population growth today will still find it by looking West (Figure 6). The West and a resurgent South are where growth occurred in this past decade. Their gains have economic and political implications.

Growth isn't exclusively geographic. Various segments of the population grow at different rates.

**Figure 6.
Percent Change In Population:
April 1980 - July 1989**

Northeast	+ 3%
South	+ 14%
Midwest	+ 2%
West	+ 20%
US	+ 9%

In this decade, the Nation's 10 percent overall growth has come disproportionately from Hispan-

ics. They now make up 8 percent of our population. Blacks/African-Americans are 12 percent of it. The fastest growing segment, Asian Americans, have moved up to nearly 3 percent of the population. Growth among Hispanics and Asians comes from both natural increase and immigration and greatly exceed that of Whites (Figure 7).

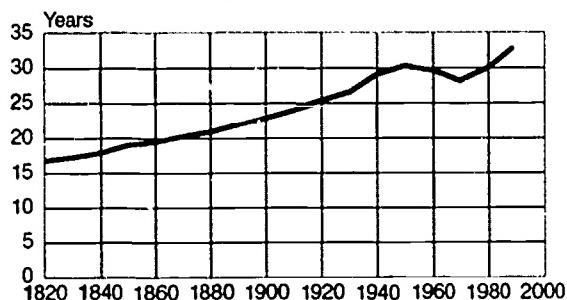
Figure 7.
Population Increase:
July 1980 - July 1989

Total US	+9%
Whites	+7%
Blacks	+14%
Hispanics (Hispanics may be of any race)	+39%
Asian or Pacific Islander	+79%
American Indian, Eskimo or Aleut	+22%

Age Distribution Change is a Social and Economic Change

In 1820 half of our population in a predominately rural America was under age 17. The residual effect is that we still have school systems that give the 3-month summer vacations needed by a rural society although our society is now an urban one. In the first half of the 19th century farm families may have needed older children working on labor-intensive farms. By contrast today, with the aging of our largest age cohort, the Baby Boom generation, half of our population is over 33. For business and industry, both labor force composition and consumer spending are very different when the median age is 16.7 than when it is 32.7, a 16 year difference (Figure 8).

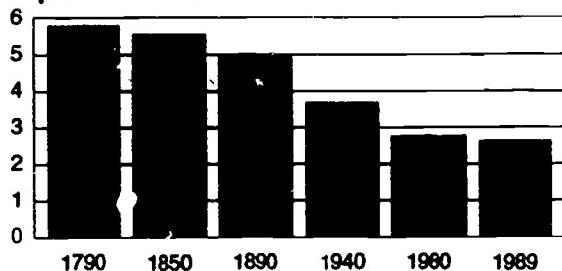
Figure 8.
Median Age of the Population



More Households in Proportion to the Population

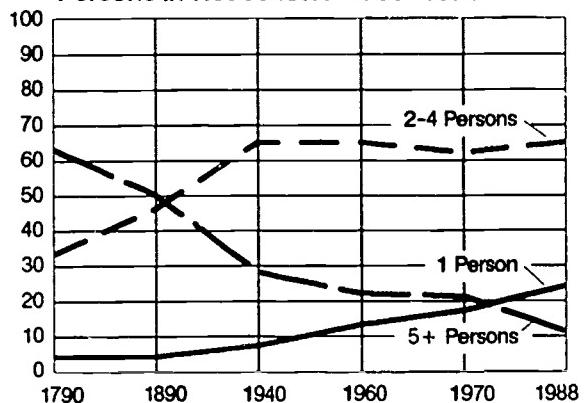
For many goods and services, as well as for the delivery of government and social programs, the market units are households rather than individuals. In 1790, our 3.9 million population clustered in households with an average of 5.8 persons. Today our 250 million are spread out in households that average only 2.6 (Figure 9).

Figure 9.
Average Number of Persons per Household



The big change in recent years is that one-fourth of our households are occupied by a single person, whereas only 4-7 percent were single person households between 1790 and 1940 (Figure 10). The proliferation of households occupied by one person living alone is a relatively recent phenomenon. For industries selling home appliances, carpets, or furniture, the proliferation of households in proportion to the population is a highly relevant statistic.

Figure 10.
Percent of Households, by Persons in Household: 1790-1970

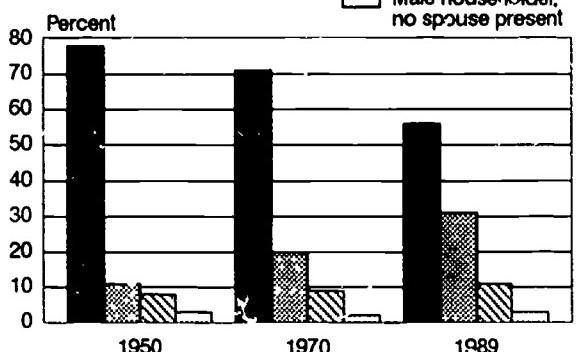


Social Change: Changing Household Composition

If the number of persons within a household has changed, clearly something has happened inside those households. Accompanying the growth in the proportion of households occupied by a single person is a decline in households maintained by married couples. In 1950, married couple households comprised 78 percent of households; by 1989 they were 56 percent (Figure 11).

Looking only at family households—meaning households which have two or more members including at least one relative of the householder—one sees that the proportion of families headed by married couples is markedly different within seg-

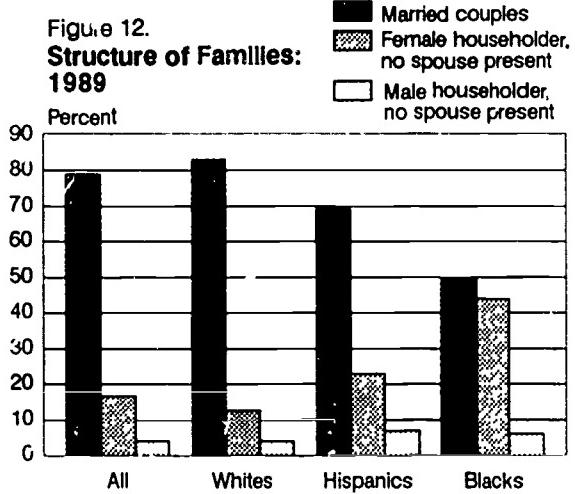
Figure 11.
Change in Structure of Households: 1950-1989



ments of our population. Eighty-three percent (83%) of White families are married couple families—not all of them, of course, on their first marriage. Seventy percent (70%) of Hispanic and only half of Black families are maintained by married couples (Figure 12).

Figure 12.

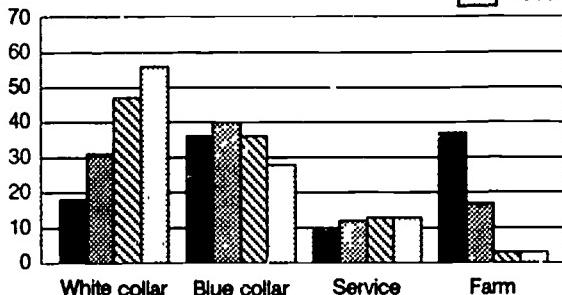
Structure of Families: 1989



From Farm to Blue Collar to White Collar

In Colonial days and during this Nation's first century, America was predominantly agricultural. By the turn of this century, the Industrial Revolution had occurred. In 1900 ours was both an agricultural and a manufacturing economy. Today white collar occupations dominate. The service/information age is here (Figure 13). White collar workers live differently from blue collar and farm workers. They spend differently and they make choices appropriate to very different lifestyles.

Figure 13.
Percent of the Civilian Labor Force, by Occupational Category

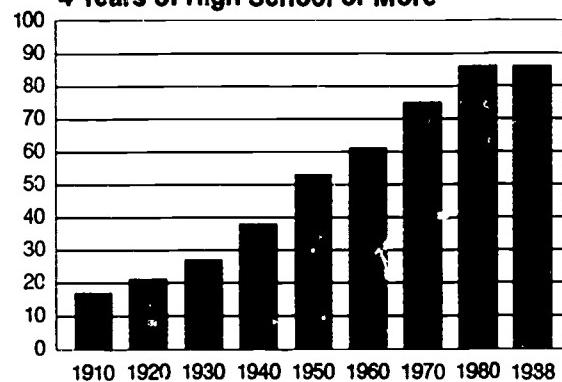


An Educated Nation

Despite the concern about literacy today, we are a far more educated nation than early in this century (Figure 14). The ideal of universal education—at least at the high school graduate level—has been realized by 86 percent of persons 25 to 29 years old. It is the remaining 14 percent who in general face the most difficult time competing in labor markets that increasingly require specialized skills. Of course, we all realize not all high school graduates are educated equally.

Figure 14.

Percent of Persons 25 to 29 Years Old Who Have Completed 4 Years of High School or More



Food and Clothing Cost Less; Medical Care More

As a percent of personal consumption, housing and household operations command approximately the same proportion of spending they did 60 years ago. Food and clothing take less of a bite. Medical care consumes a far greater proportion (14 percent in 1988 compared to 5 percent in 1930) (Figure 15). Despite the growth in number of cars per household, transportation as a percentage of personal consumption has increased only from 9 to 13 percent. Consumer expenditure data come from the

Figure 15.
**Percent of Personal Consumption,
by Type of Product**

	1930	1950	1970	1988
Food/beverages/tobacco	28	30	23	18
Clothing/personal care	15	13	12	8
Housing	30	27	29	28
Medical care	4	5	7	14
Other	14	12	16	19
Transportation	9	13	13	13

Census Bureau's current surveys rather than from the decennial census.

Social Change: Women in the Work Force

The most dramatic social change of our times is the increasing participation of women in the work force (Figure 16). Today this participation is nearly as great among married women as among single ones. The days when women left employment upon the birth of a child are over, as witness that in 1988, 57 percent of married women with children under 6 were in the labor force.

Figure 16.
Percent of Women in the Labor Force

Year	Total Women	Married/spouse present/one or more children under 6		
		Single	Married	
1960	35	44	31	19
1970	43	53	41	30
1980	51	62	50	45
1988	56	65	57	57

Income Differences Among Population Segments

Differences in family composition, discussed earlier, and differences in race and ethnicity impact heavily upon income. The winners in today's society—and one symbol of winning is that the household receives lots of targeted direct mail—are the dual-income married couples. In 1988, the median income of their families was \$10,500 greater than the average of all families and \$27,400 greater than a family maintained by a woman without a husband present (Figure 17).

There remains a marked difference in income in our society today by race and Hispanic origin (incidentally, Hispanics can be of any race) (Figure 18). A partial explanation is that the median income of Black and Hispanic families is brought down as a result of the 44 percent of Black families and 23 percent of Hispanic families maintained by a woman with no spouse present. That, however, is not

Figure 17.
**Median Income, by
Household Structure: 1988**

Families	Income
All	\$32,190
Married couple	\$36,390
Married couple, wife in labor force	\$42,710
Male householder, no wife	\$26,830
Female householder, no husband	\$15,350
Living Alone	
Men	\$18,280
Women	\$11,620

Figure 18.
**Median Family Income,
by Race/Ethnicity: 1988**

Families	Income
All	\$32,190
Whites	\$33,920
Hispanics	\$21,770
(Hispanics may be of any race)	
Blacks	\$19,330

the entire explanation. Differences in educational and job opportunities persist. These are the social statistics to address if our constantly changing, increasingly urban, increasingly information and service-oriented Nation is to compete successfully in the world of the 21st century.

What the Census Promises

This is an overview of what past censuses show plus a hint of what we can anticipate when 1990 data starts to become available next year. The decennial census is a rich source of statistics for industry and business as well as for the public sector for which it is designed. Its periodicity and size are major reasons for its value. By looking at our reflection every 10 years we can see how far we've come and the problems we should address in the future. Because it is a census, which includes a 17 percent national sample survey, the decennial census provides detailed data at the small area level. It can be used for profiling a block or a neighborhood as well as a community, a metropolitan area, a state, or the Nation.

In recent times, the decennial census, the economic, agriculture and government censuses, and the ongoing economic and household surveys conducted by the Bureau of the Census have become more valuable to users. The computer has freed users from being restricted only to the data the Bureau of the Census sees fit to put into published reports. Even with the anticipated 500,000 pages

the Bureau of the Census will publish in the numerous reports that will start appearing next year, these cannot cover all possible findings of the 1990 census any more than the 56-page report of the 1790 census told all that was happening then.

In 1950, some census data were available on punchcards which could be manipulated by computers. The Bureau of the Census first released data on computer tape after the 1960 census when access to computers was still the province of big government, big universities, and big companies. What has changed since 1960, and most markedly since 1980, is that computer technology has democratized

Footnote

¹ Urban includes places of 2,500 or more. A full definition is provided in 1980 Census of Population, PC80 A-1, Appendix A.

Sources for figures

- Figure 1: U.S. Department of Commerce, Bureau of the Census, *1980 Census of Population PC80-1-A1 U.S. Summary*, p. 1-14.
- Figure 2: U.S. Department of Commerce, Bureau of the Census, *Historical Statistics of the United States. Colonial Times to 1970*, Part I, p. 11; 1980 Census of Population PC80-1-A1, pp. 1-41-4; *Statistical Abstract of the United States 1990*, p.34.
- Figure 3: U.S. Department of Commerce, Bureau of the Census, *Historical Statistics of the United States, Colonial Times to 1970*, Part I, p. 11; *1980 Census of Population PC80-1-A1*, pp. 1-41-4; *Current Population Reports*, Series P-23, No 164, p. 2;
- Figure 4: U.S. Department of Commerce, Bureau of the Census, *Historical Statistics of the United States, Colonial Times to 1970*, p.22; *1980 Census of Population*, PC80-1-A1, pp. 1-35.
- Figure 5: U.S. Department of Commerce, Bureau of the Census, *Historical Statistics of the United States, Colonial Times to 1970*, p. 22; *Current Population Reports*, Series P-25, No. 1058, p. 3
- Figure 6: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports Series P-23*, No. 164, "How We're Changing," January 1990.
- Figure 7: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, Series P-25, No. 1057, "U.S. Population Estimates by Age, Sex, Race, and Hispanic Origin: 1989," p. 2.
- Figure 8: U.S. Department of Commerce, Bureau of the Census, *Historical Statistics of the United States, Colonial Times to 1970*, p. 19; *Census of Population*, PC80-1-A1, p. 37; *Current Population Reports*, Series P-25, No. 1057, "U.S. Population Estimates by Age, Sex, Race, and Hispanic Origin: 1989," p. 2.

data access. For the first time decennial census data will be available on CD-ROM disks for users of personal computers. This means there will be many more players—students, schools, religious congregations, small businesses, nonprofit organizations, advocacy groups, as well as government agencies, universities, business, and industry, using demographic, economic, and social statistics as tools for decision making. With a CD-ROM reader on your personal computer, you can be among them. You can monitor social change and make hypotheses about the future.

Figure 9: U.S. Department of Commerce, Bureau of the Census, *Historical Statistics of the United States, Colonial Times to 1970*, Part I, p. 41; *Statistical Abstract of the United States 1990*, p. 45.

Figure 10: U.S. Department of Commerce, Bureau of the Census, *Historical Statistics of the United States, Colonial Times to 1970*, p. 42; *Population Profile of the United States 1989*, P23, No. 159, p. 25.

Figure 11: Wetzel, James R., "American Families: 75 Years of Change," *Monthly Labor Review*, March 1990, p. 7.

Figure 12: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, Series P-20, No. 441, "Households, Families, Marital Status, and Living Arrangements: March 1989 (Advance Report)", p. 5.

Figure 13: U.S. Department of Commerce, Bureau of the Census, *Historical Statistics of the United States, Colonial Times to 1970*, p. 139 (1900-1970 percent of experienced labor force); *Statistical Abstract of the United States 1990*, pp. 389-391 (1980 percent of employed).

Figure 14: John K. Folger and Charles B. Nam, *Education of the American Population, 1967*, p. 143 (for 1910-1960); *Current Population Reports*, Series P-20, No. 428, "Educational Attainment in the United States: March 1987 and 1986," p. 75 (for 1970 and 1980), and Series P-23, No. 159, "Population Profile of the United States: 1989," p. 22 (for 1988).

Figure 15: U.S. Department of Commerce, Bureau of the Census, *Historical Statistics of the United States, Colonial Times to 1970*, pp. 317-319; *Statistical Abstract of the United States 1990*, p. 430.

Figure 16: U.S. Department of Commerce, Bureau of the Census, *Statistical Abstract of the United States, 1990*, pp. 384-385.

Figure 17: U.S. Department of Commerce, Bureau of the Census, *Money Income, and Poverty Status in the United States, 1988*, p. 32.

Figure 18: U.S. Department of Commerce, Bureau of the Census, *Money Income and Poverty Status in the United States, 1988*, pp. 32-35.

Appendix 16

END

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